



Bulletin No. 9

April 13, 1984

Whirlpool Rash In A Wrestling Team

On March 8, 1984 the Epidemiology Office was notified of an outbreak of skin rash among six high school wrestlers and their coach. The rash was described as small, white-centered papules on an erythematous base, most prominent on hair-bearing areas of the body. Of the 7 persons with rash, 4 also had axillary adenopathy, and 2 complained of sore throat at the onset of the skin eruption. The first person to develop rash was a 17-year-old male wrestler whose lesions appeared February 27, three days after he had used a whirlpool in Delta, Alaska while on a wrestling road trip. It was also February 27 that he and a fellow team member tried out his coach's whirlpool in Glennallen. The 17-year-old claimed the whirlpool soothed his itching skin; his team-mate developed rash February 29.

Between March 6-8, four additional team members and their coach developed similar rashes. On March 5-6 all five used the coach's whirlpool within a day of its use by of the two team members already ill, both of whom were affected by new crops of lesions. None of seven wrestling team members who did not use the whirlpool were affected by rash. The coach's wife also did not develop rash; although a whirlpool regular, she had not used the tub for two days after its use by the wrestlers with active cases. Among the seven patients affected, rash lasted 6-14 days; three were prescribed oral antibiotics.

Pseudomonas aeruginosa was cultured from the papules of 6 of the 7 patients affected. *Pseudomonas aeruginosa* was also cultured from a water sample taken from the coach's Glennallen whirlpool and from the whirlpool's filter. While a number of organisms were cultured from the water and filter of the Delta whirlpool, *Pseudomonas* was not one of them.

Both the Delta and Glennallen whirlpools were 3-4 person tubs with heaters, agitators, and filters. The Delta tub had a stainless steel surface, while the Glennallen whirlpool was acrylic. While the Glennallen coach added an organic chlorine product to his tub regularly in order to maintain a free chlorine concentration of 0.8 parts per million (2ppm is recommended), only green soap was added to the Delta whirlpool.

Although the whirlpool in Delta cannot be directly implicated in this outbreak, the transmission of *Pseudomonas* dermatitis to five team members and their coach seems to be associated with the use of the Glennallen whirlpool by a wrestler who had *Pseudomonas* folliculitis. All persons using the Glennallen whirlpool within a day of their infected colleague were affected with papular dermatitis. Information on hot tub and whirlpool safety can be found in the booklet "Staying Happy and Healthy in Your Spa & Hot Tub" available for \$1.50 post paid from the Environmental Health Division, 15-L, Seattle-King County Department of Public Health, 400 Yesler Building, 7th Floor, Seattle, WA 98104.

For health care providers, this outbreak is instructive in that:

1. patients with papular dermatitis should be asked about hot tub and whirlpool exposure,
2. in general, *Pseudomonas* folliculitis resolves without antimicrobial therapy,
3. patients with folliculitis should be advised to stay out of tubs while their disease is active, and
4. the diagnosis of hot tub or whirlpool-associated folliculitis should trigger review of tub hygiene as well as remedial action to prevent reinfections.

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